often at the height of several feet. The upper side of the leaves has a highly repellent power for water, owing to its finely polished surface, from which the fluid rolls off as from a coating of oil. When the buds have attained to maturity, they emerge and expand their flowers. This takes place in the morning; and when the sun is bright, a bed of these flowers presents a truly magnificent spectacle. Owing to the concavity of the calyx and petals they continue to float during a great part of the day. They are seldom elevated from the surface, except when the stem is uncommonly large, or pushed upward by some displacement of the adjacent leaves. At night, or before, the flowers close, and either rest on the surface or sink beneath it till the subsequent day. When flowering is over, the germ sinks to the bottom and there ripens its fruit.

The genus Nymphæa is now separated from some other plants formerly attached to it by the following character. *Calyx four or five leaved; petals many, inserted into the germ below the stamens; stigma radiated, sessile with a tubercle in the middle; berry many celled, many seeded.* This species very nearly resembles the *N. Alba* of Europe, but appears distinct by the following marks. *Leaves orbicular-cordate, entire, the lobes*

acuminate, and veins prominent beneath; calyx four-leaved, equal to the petals.—Linnæus placed this genus in his *Miscellaneæ*, and Jussieu with the *Hydrocharides*.

The stalks, both of the leaves and flowers, spring directly from the root. They vary in length from one foot to five or six, according to the depth of the water. The petioles are somewhat semicircular, the scapes round. Both are perforated throughout by long tubes or air-vessels which serve to float them. The leaves, which swim on the surface, are nearly round with a cleft or sinus extending to the centre, at which the petiole is inserted in a peltate manner. The lobes on each side of this sinus are prolonged into an acute point. The upper surface is of a bright glossy green almost without veins; the lower surface is reddish and marked by a multitude of strong prominent veins diverging from the centre. The calyx has four lanceolate leaves, green without and white within. Petals numerous, lanceolate, of a delicate whiteness, with sometimes a tinge of lake on the outside. Stamens numerous, yellow, in several rows; the filaments dilated, especially the outer ones, so as to resemble petals; the anthers in two longitudinal cells growing to the filaments and opening

JACOB BIGELOW *American Medical Botany* BOSTON, 1817-1820 CARY GRAPHIC ARTS COLLECTION, ROCHESTER INSTITUTE OF TECHNOLOGY Octavo